

Claims

- 1) A method of producing non gelatin film or films, comprising:
- a) forming one or more non-gelatin polymeric films, with or without active ingredients incorporated therein
 - b) applying a fluid to one or more surfaces of the film (s), said fluid incorporating at least one active ingredient
 - c) allowing the fluid applied to at least partially cure and associate with the film, to result in either:
 - d) one or more layers formed on, about or within the film (s), said layer or layers being at least partially incorporated in the film.

Or

the fluid being absorbed within the film, wholly or partially, and forming a homogeneous polymer film product.

Or

a combination of both of the above

- 2) A method according to claim 1 wherein the non gelatin film produced, comprises one or more layers which associate with one another to a lesser or greater degree to form a partially or wholly polymerically homegenious film.
- 3) A method according to claim 1 wherein the polymeric mass of the film or films is increased marginally or substantially after steps b), c) or d) .
- 4) A method according to claim 1 wherein the fluid is a liquid
- 5) A method according to claim 1 whereby one or more polymeric substances are also deposited on the film surface.
- 6) A method according to claim 1 wherein the active ingredient in the liquid is transported onto or into the film during either or both steps c) or d) of claim 1.

- 7) A method according to claim 2 wherein the active ingredient is selectively transported.
- 8) A method according to claim 1 wherein the non gelatin film comprises a cellulose ether film
- 9) A method according to claim 1 wherein the non gelatin film comprises one or more of the following polymers:

hydroxypropyl methylcellulose (HPMC),
hydroxy propyl cellulose (HPC),
hydroxy ethyl methyl cellulose (HEMC),
hydroxy ethyl cellulose (HEC),
methyl cellulose (MC),
carboxy methylcellulose (CMC)
sodium carboxy methylcellulose

and salts and derivatives of all aforesaid.

- 10) A method according to claim 1 wherein the liquid comprises a same or similar polymeric material as to which forms the non gelatin film
- 11) A method according to claim 1 wherein the liquid comprises a material which chemically or physically compatible with the material which forms the non-gelatin film
- 12) A method according to claim 1 wherein the active ingredient is transported from the liquid to the film
- 13) A method according to claim 1 wherein the active ingredient has a higher affinity for the liquid than the film
- 14) A method according to claim 1 wherein the film active ingredient has a higher affinity for the film than the liquid
- 15) A method according to either of both of claims 10 and 11 wherein 2 or more active ingredients have the same or differing affinities for the film and liquid
- 16) A film produced by the method in claim 1
- 17) A film comprising 2 or more layers wherein one or more active ingredients are present in the same or differing quantities in relationship to the differing layers.

- 18) A film according to claim 1 wherein one or more active ingredients are present in the film and which have concentration gradients associated with one or more bands or patterns within the film.
- 19) A film produced according to claim 1 wherein the active ingredient continues move or be transported after the curing stage.
- 20) A film according to claim 1 wherein one or more layers associate with one another to a lesser or greater degree to form a level of polymeric homogeneity
- 21) A film according to any previous claim, which is coiled
- 22) A film according to any previous claim which is folded in a zig-zag formation
- 23) A pharmaceutical dosage form comprising multi - layers of film formed from films according to any previous claim
- 24) A pharmaceutical dosage form of claim 22 wherein the films are laid together before any liquid or transport medium applied has cured or dried.
- 25) A film produced in accordance with any previous claim wherein the film is packaged to form a dose unit
- 26) A sheet of film produced in accordance with any previous claim wherein the film has liquid according to claim 1 applied to it, on one or both sides, and on opposing/adjacent areas or non-opposing or adjacent areas or overlapping areas to form a pattern.
- 27) A dosage form produced from a sheet of film wherein the pattern produced with respect to the film provides a delayed active drug release profile.
- 28) A pharmaceutical dosage form derived from a film produced by a method claimed in any previous claim or a film claimed in any previous claim
- 29) Use of a film as claimed in any previous claim wherein the film is placed on the tongue of a human or animal and the active ingredients are released in a convenient manner as the film disintegrates.
- 30) A tablet, powder slug or capsule made from or coated, enrobed or encapsulated with a film according to the present invention
- 31) A tablet or monolith made from multiple layers of film according to any previous claim

- 32) A tablet or monolith according to claim 31 wherein said tablet or monolith comprises three to forty layers.
- 33) A tablet or monolith according to claim 31 wherein said tablet or monolith comprises 8 to 25 layers.
- 34) A tablet or monolith according to claim 31 wherein the tablet or monolith comprises 10 to 20 layers.
- 35) A multicellular dosage form made from a film or films in accordance with any previous claim.